

## Board of Trustees Agenda

### Wednesday, August 17, 2016

- Call Meeting to Order (Start time 12:00pm)
- 2. Administrative
  - a. Approval of minutes July 20, 2016 Attached, Exhibit (A) pages 2-3
  - b. Work Plan

Attached, Exhibit (B) page 4

- c. Custody Update
- d. Branding/Website Update
- Quarterly Budget Review Attached, Exhibit (C) pages 5-6
- SCT Update
- 3. Research Update
  - a. Income Mapping Update Attached, Exhibit (D) pages 7-11
  - b. Investment Process Review Attached, Exhibit (E) pages 12-20
- 4. Investment Review Attached, Exhibit (F) pages 21-39
- 5. Adjourn

One or more members of the Board may participate via electronic conference originated by the Chair, and the meeting may be an electronic meeting, and the anchor location shall be as set forth above, within the meanings accorded by Utah law. In compliance with the Americans with Disabilities Act, individuals requiring special accommodations during the meeting may notify SITFO in advance 801-364-0821 or rkulig@utah.gov.









Exhibit A

### **Board of Trustees Minutes**

#### July 20, 2016 at 12:00 pm

Board Members Attending: David Damschen, John Lunt, David Nixon, Kent Misener, and Duane Madsen.

Others Attending: Peter Madsen, SITFO; Allen Rollo, Treasurer's Office; Kirt Slaugh, Treasurer's Office; Michael Green, Utah AG; Natalie Gordon, USBE – SCT; Ryan Kulig, SITFO; Nathan Barnard, SITFO; David Center, FEG; Paula Plant, USBE – SCT; Margaret Bird, Univ. of Utah, USU, MH, SM, NS; Bryan Nalder, Utah AG; Tim Donaldson, USBE – SCT; Jonathan Kowolik, RVK Inc.; Kim Cash, RVK Inc.; Andrew Fairbanks, SITFO.

#### 1. Call Meeting to Order

Mr. Damschen called meeting to order.

#### 2. Administrative

- a. Approval of minutes Mr. Lunt made the motion to approve the minutes, Mr. Duane Madsen seconded the motion. Mr. Damschen, Mr. Nixon and Mr. Misener voted in favor and the motion passed unanimously.
- **b.** Work plan Mr. Peter Madsen reviewed the work plan with the Board. He noted the importance of expediently choosing a custodian.
- c. Policies update Mr. Kulig presented the updated soft dollar policy, including the suggested corrections to the language of the document. Mr. Peter Madsen suggested that some language be introduced to the policy to allow for necessary flexibility in the soft dollar policy. Mr. Green advised on the specific language that would be appropriate for the policy. The staff took note of the language to be included in the final document. Mr. Kulig also reviewed the Code of Conduct and Compliance policy. Mr. Green suggested the inclusion of additional language regarding a cited policy, and stated that he would provide said language. Mr. Misener made a motion to approve both of the policies as amended. Mr. Damschen clarified that the documents were effectively amended per the Board's discussion, and that the approval of the policies is contingent upon the necessary changes being included. Mr. Nixon seconded the motion. Mr. Lunt, Mr. Duane Madsen and Mr. Damschen voted in favor and the motion passed unanimously.
- d. **SCT update** Mr. Donaldson provided an overview of the recent activities of the School Children's Trust, as well as plans for the upcoming months. Mr. Donaldson noted actions

taken by other States programs similar to that of SITFO. He added that the distribution will be \$49.3 million this fiscal year and will be distributed in August.

#### 3. Custodian Recommendation

Ms. Cash and Mr. Kowolik presented the methodology and findings of the custodian search. They recommended that the SITFO staff visit the finalist custodians before making a decision. Mr. Duane Madsen motioned to move forward with the due diligence of the two finalists, select a finalist, and begin the contracting process prior to next meeting. Mr. Misener seconded the motion. Mr. Lunt, Mr. Damschen and Mr. Nixon voted in favor and the motion passed unanimously.

#### 4. Asset Allocation

Mr. Barnard and Mr. Center presented an updated analysis of the asset allocation and proposed a long-term strategic allocation. Mr. Misener motioned to approve the long-term strategic allocation and adopt for inclusion in the IPS, Mr. Lunt seconded the motion. Mr. Damschen and Mr. Nixon voted in favor and the motion passed. Mr. Duane Madsen was absent from this portion of the meeting.

#### 5. Investment Review

Mr. Barnard reviewed the asset allocation of the trust funds and noted that the performance reporting transition to FEG is ongoing.

#### 6. Adjourn

Mr. Misener made the motion to adjourn. Mr. Nixon seconded the motion. Mr. Damschen and Mr. Lunt voted in favor. The meeting was adjourned.

### Exhibit B

#### August 2016

#### School & Institutional Trust Fund BOARD - Work Plan

Rolling Estimation for Topics of Discussion at Board Meeting

Rolling Estimation for Topics of Discussion at Board Meeting								
Aug	Sep	Oct	Nov	Dec	Jan			
Custody Selection	Custody Implementation	Custody Implementation	Operations Review	Meeting?	Research - Private Equity			
Research - Credit Manager	Research - Credit Manager	Research - Sub Investment Grade	Research - Non-US Debt		Research - Non-US Debt			
Research - Securitized Managers	Research - Securitized Managers	Research - Equity Frontier / Microcap	Research - Equity Frontier / Microcap		Research - Equity Beta Structure			
Branding/Website	Research - Defensive Managers	Research - Defensive Managers	Research - Defensive Managers					
Quarterly Budget Review		Research - Private Real Assets						
		Annual Board Training	Quarterly Budget Review					

## Exhibit C

	Through Fiscal Period 13	FYTD	FY16 Budget
<b>AA Personnel Servio</b>	ces	\$466,047	\$465,855
CC Travel/Out of Sa	ite	\$11,521	\$19,250
<b>DD Current Expense</b>	e	\$217,502	\$291,495
<b>EE Data Processing</b>	Current Expense	\$11,240	\$15,500
<b>GG Capital Expendi</b>	ture	\$18,054	\$40,000
TOTAL INCOME	School Trust Funds Management Account Appropriation	\$865,000	\$865,000
TOTAL EXPENSE		\$724,364	\$832,100
DIFFERENCE		\$140,636	\$32,900

Through Fiscal Period 13	FYTD	FY16 Budget	Over/Under FY16
AA Personnel Services	\$466,047	\$465,855	-\$191
5101 Regular Salaries & Wages	\$285,113.91	\$303,594.90	\$18,481
5110 Leave Paid	\$31,656.81	\$20,000.00	-\$11,657
5120 Miscellaneous Earnings	\$212.43	\$50.00	-\$162
5135 Compensatory/Excess Time Used	\$4,919.88	\$2,000.00	-\$2,920
5140 Compensatory/Excess Time Earned (FLSA Exempt & Non-Exempt)	\$3,120.90	\$2,000.00	-\$1,121
5160 Sate Retirement	\$67,455.29	\$65,606.95	-\$1,848
5170 FICA/Medicare	\$23,685.78	\$20,700.00	-\$2,986
5180 Health, Dental, Life & Long-Term Disability Insurance	\$27,462.61	\$30,000.00	\$2,537
5190 Unemployment & Workers Compensation Insurance	\$2,921.13	\$3,200.00	\$279
5199 Compensatory/Excess Time Earned Benefits (FLSA Exempt)	\$936.43	\$500.00	-\$436
5300 Sate Leave Pool	\$18,561.65	\$18,203.52	-\$358
CC Travel/Out of Sate	\$11,521	\$19,250	\$7,729
6053 Out of State Travel-Miscellaneous Travel Expense	\$19.00	\$0.00	-\$19
6054 Out of State Travel-Maximum Auto Mileage Rate	\$0.00	\$250.00	\$250
6055 Out of State Travel-Meal Reimbursement	\$881.00	\$2,000.00	\$1,119
6056 Out of State Travel-Lodging Reimbursement	\$3,147.31	\$2,000.00	-\$1,147
6057 Out of State Travel-Transportation Costs	\$7,473.84	\$15,000.00	\$7,526
6096 Central Travel Clearing Account	\$0.00	\$0.00	\$0
DD Current Expense	\$217,502	\$291,495	\$73,993
6115 Human Resource Services	\$0.00	\$1,800.00	\$1,800
6126 Wireless Communication Service	\$1,016.71	\$2,700.00	\$1,683
6132 Communication Services	\$768.47	\$1,640.00	\$872
6136 Postage & Mailing	\$66.25	\$1,000.00	\$934
6137 Professional & Technical Services-Non-medical	\$70,212.44	\$95,505.00	\$25,293
6138 Attorney Fees	\$8,923.50	\$3,500.00	-\$5,424
6145 Required Technical References	\$525.00	\$0.00	-\$525
6146 Recruiting Expenses	\$383.58	\$0.00	-\$384
6161 Rental of Land & Buildings	\$31,352.00	\$31,350.00	-\$2
6166 Parking Space Rent & Bus Pass Cost	\$300.00	\$2,000.00	\$1,700
6181 Office Supplies	\$5,354.53	\$25,000.00	\$19,645
6182 Printing & Binding	\$0.00	\$2,500.00	\$2,500
6185 Books & Subscriptions	\$746.94	\$3,000.00	\$2,253
6186 Photocopy Expenses	\$0.00	\$1,000.00	\$1,000
6187 Small Office Equipment Less Than \$5000	\$1,856.64	\$2,500.00	\$643
6188 Office Furnishings Less Than \$5000	\$43,209.48	\$50,000.00	\$6,791
6189 Other Small Equipment & Supplies Less Than \$5000	\$8,691.41	\$2,500.00	-\$6,191
6208 Container Plants	\$3,265.00	\$2,000.00	-\$1,265
6257 Risk Management Insurance & Bonds	\$0.00	\$2,000.00	\$2,000
6260 Purchasing Card Current Expenses	\$0.00	\$20,000.00	\$20,000
6271 Reception & Meeting Costs	\$105.15	\$3,000.00	\$2,895
6274 Membership Dues	\$625.00	\$2,500.00	\$1,875
6276 Conventions, Seminars, Workshops & Comittees	\$0.00	\$4,000.00	\$4,000
6277 Employee Relocation Expense	\$13,178.40	\$15,000.00	\$1,822
6282 Employee Educational Assistance	\$1,652.00	\$5,000.00	\$3,348
6300 Dept of Technology Services Telecommunication Charges	\$12,020.27	\$12,000.00	-\$20
6400 Remodel & Improvements-Current Expense	\$13,249.65	\$0.00	-\$13,250
EE Data Processing Current Expense	\$11,240	\$15,500	\$4,260
6467 Data Processing Hardware Less Than \$5000-Desktop Computer	\$1,242.12	\$5,000.00	\$3,758
6469 Data Processijng Hardware Less Than \$5000-Desktop Computer	\$1,242.12 \$3,566.00	\$6,000.00	\$3,738 \$2,434
6471 Data Processing Hardware Less Than \$5000-Laptop/Notebook	\$3,566.00	\$500.00	\$2,434 -\$103
·			
6472 Data Processing Software Less Than \$5000 6500 Dept of Technology Services-Data Processing Charges	\$1,860.14 \$3,968.69	\$0.00 \$4,000.00	-\$1,860 \$31
6300 Dept of reciliology services-Data Processing Charges	\$3,500.05	\$4,000.00	\$31
GG Capital Expenditure	\$18,054	\$40,000	\$21,946
6702 Office Furniture & Equipment	\$18,053.81	\$40,000.00	\$21,946
TOTAL INCOME School Trust Funds Management Account Appropriation	\$865,000	\$865,000	\$0
TOTAL EXPENSE	\$724,364	\$832,100	\$107,736
DIFFERENCE	\$140,636	\$32,900	\$107,736

08.17.2016

# Income Research Update



#### **Income Structure**

#### Return/Risk

- Understanding implicit equity beta, isolating exposures to manage risk
- Overweight below investment grade as proxy to equity returns

### Opportunity

 Overweight to securitized and inclusion of private debt to participate in less traveled markets

#### **Benefits**

- Global macroeconomic headwinds
- Higher up in capital structure than equity, lower volatility, similar forward looking returns
- Higher proportion of returns as income for repurposing
- Regulatory changes generating opportunities in credit

	Credit	Securitized	Non-US
Liquid	Higher Quality Credit Manager(s)	Higher Quality Securitized Manager(s)	
Semi- Liquid	Lower Quality Credit Manager(s)	Lower Quality Securitized Manager(s)	Non-US Manager(s)
Illiquid	Pr	ivate Debt - Opportunistica	lly

Risk Category	Asset Class	Portfolio Weight	Asset Class Weight	Benchmark
Income	US Corporate Debt	9.00%	29.0%	50% Barclays US Corp, 25% Barclays US Corp HY, 25% CS Leveraged Loans
Income	US Securitized Debt	8.00%	25.8%	50% Barclays MBS, 25% Barclays CMBS, 25% Barclays ABS
Income	Non-US Debt (EMD)	5.00%	16.1%	50% Citi Non-US WGB, 16.7% JPM EMBI, 16.7% JPM GBI-EM (Unhedged), 16.7% JPMorgan CEMBI
Income	Private	9.00%	29.0%	Thomson Private Debt Index



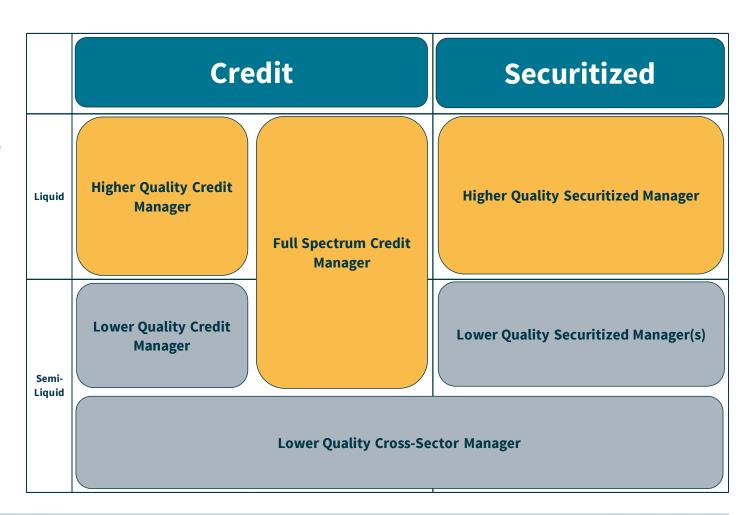
## **Credit/Securitized Structure**

### Market Coverage

 Matching complementary niche managers allows for better opportunities within each market

## Broad mandates to increase opportunity

 Increasing mandate flexibility where it makes sense to take advantage of unique manager skillsets



**SITFO** 

Mock Credit/Securitized Portfolio Statistics	W	imated eight smm)	Estimated Weight (%)	Estimated Yield	Estimated Duration
Credit Composite	\$	160	47%	5.6	3.9
High Quality Manager	\$	40	12%	3.9	2.1
Full Spectrum Manager	\$	100	29%	6.0	4.5
Low Quality Manager	\$	20	6%	7.2	4.3
Credit Benchmark (50% Inv. Grade, 25% High Yield, 25% Bank Loans)				4.6	4.7
Investment Grade Credit				2.8	7.2
High Yield				6.9	4.3
Bank Loans				6.1	0.0
Securitized Composite	\$	140	41%	6.5	2.6
High Quality Manager	\$	80	24%	5.2	3.5
Low Quality Manager(s)	\$	60	18%	8.2	1.5
Securitized Benchmark (50% MBS, 25% ABS, 25% CMBS)				1.9	3.1
Mortgage Backed Securities				1.8	3.4
Asset Backed Securities				1.6	1.3
Commercial Mortgage Backed Securities				2.3	4.5
Low Quality Cross-Sector Manager	\$	40	12%	10.0	3.0
Cross-Sector Benchmark (50% Securitized, 25% High Yield, 25% Bank Loans)				4.2	2.6
Credit/Securitized Composite	\$	340	100%	6.5	3.3
Credit/Securitized Benchmark				3.3	3.9

### **Income Bucket Build-out Timeframe**

	Idea Generation	Asset Allocation	Asset Class Structure	Manager Research	Implementation
Credit	Done	Done	Done	Ongoing	Expected Fall/Winter
Securitized	Done	Done	Done	Ongoing	Expected Fall/Winter
Non-US	Done	Done	Ongoing	Ongoing	Expected Winter/Spring
Private Debt	Done	Done	Ongoing	Ongoing	Opportunistically



08.17.2016

# **Investment Process Update**



### **School & Institutional Trust Funds Office**

The Board of Trustees consists of the State Treasurer (Chairperson) and four additional members who are appointed based on their institutional investment experience

The staff consists of three persons:

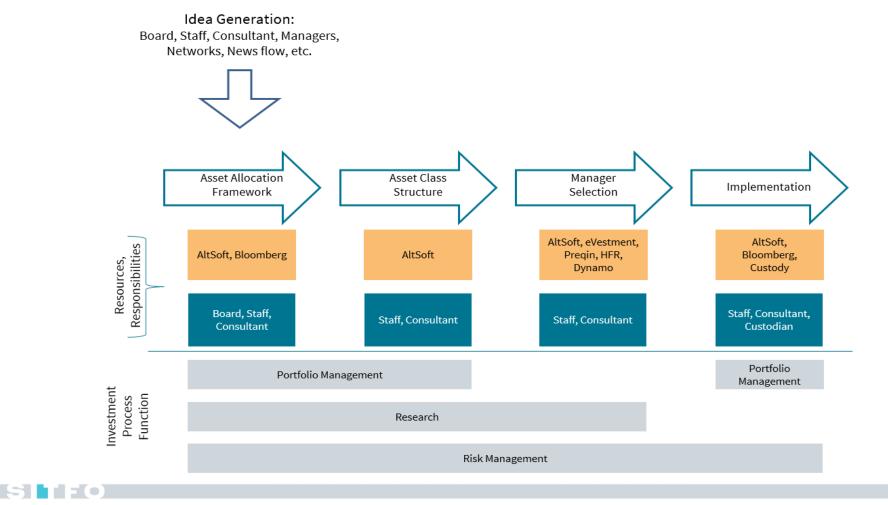
- Director, Chief Investment Officer
- Senior Investment Analyst
- Administrative Analyst

### 3rd Party Resources:

- Investment consultant
- Data/Research vendors
- Portfolio & Risk management software
- Custodian bank
- Investment managers



### **Investment Process**



#### **Investment Process**



Board, Staff, Consultant, Managers, Networks, News flow, etc.





- · Fit w/objectives
- · Gaps/Needs
- Contribution to:
  - Risk
  - Return
  - · Liquidity
  - Diversification

#### Asset Class Structure

- Repeat asset allocation questions
- Opportunity set specific
- Liquidity
- Active/Passive
- Marginal contrib.

#### Manager Selection

- · Strategy fit
- Marginal contrib.
- Investment Due Diligence
  - Desktop review
  - Phone/In-person/On-site reviews
  - Fee negotiation
  - Diversification
- Operational Due Diligence

### Implementation

- Target/Sizing
- Monitoring
- Rebalancing
- · Capital flows

Resources, Responsibilities

AltSoft, Bloomberg

Board, Staff, Consultant AltSoft

Staff, Consultant

AltSoft, eVestment, Preqin, HFR, Dynamo

Staff, Consultant

AltSoft, Bloomberg, Custody

Staff, Consultant, Custodian

### **Manager Due Diligence Process**



- · Strategy fit
- Marginal contrib.
- Investment Due Diligence
  - · Desktop review
  - Phone/In-person/On-site reviews
  - · Fee negotiation
  - Diversification
- Operational Due Diligence

AltSoft, eVestment, Preqin, HFR, Dynamo

Staff, Consultant

- 1. Investment Thesis Document
- 2. AltSoft, eVestment, FEG modeling of fit in portfolio, Analyzing performance
- 3. Deep dive research memo
- Firm
- Team
- Process/Philosophy
- Performance Analysis
- Terms and Fees
- 4. ODD responsibility of FEG



#### **Investment Thesis Document**



SCHOOL & INSTITUTION

200 E SOUTH TEMPLE, SUITE 10 SALT LAKE CITY, UT 84111 801-364-0821

### Investment Thesis

Manager Name: Waterfall Asset Management Date: 8/17/2016 Asset Class: Income - Securitized Risks: Securitized - ABS, CMBS, RMBS 1st Chair: Nathan Barnard 2nd Chair: Peter Madsen

#### Role in Portfolio:

- . Low Quality Securitized manager will have exposure to off-the-run securitized sectors
- . Targeting returns of high single digits with low interest rate risk

#### Rationale for hiring:

- Deep team, good performance track record
- . Investment process targets off-the-run High Yield ABS and other securitized sectors

#### Rationale for firing:

- Departure of founder Jack Ross or other key investment personnel
- Since strategy is hedged (typically net long of 75% to 100%) there is less worry about valuations, however, if spreads tighten drastically position should be reduced

#### Rationale for overweight/underweight:

- Given risk of the strategy, we look to pair Waterfall with higher quality Securitized as well as an
  additional low quality securitized manager
- Position size should be consistent with asset allocation; we would look to increase the allocation if there was a significant spread widening within securitized

### Addresses:

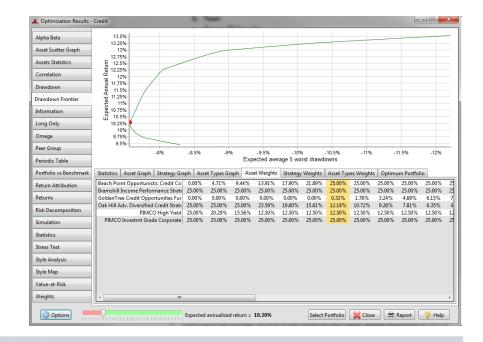
- Role in the portfolio
- Rationale for hiring the manager
- Rationale for firing the manager
- Rationale for an overweight position/underweight position in the manager



### **Portfolio Fit & Performance Analysis**

- Historical performance, attribution, risk analysis compared to peers and benchmarks
- Assesses fit with current manager lineup and other managers under consideration

					LOBAL	QUITY	
MANAGER CON	AD A DIG	INO					
MANAGERCON	/IPANI	SUN					
TRAILING PERFORMANCE (As Of	September 201	5)					
	QTR	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Albizia ASEAN Opportunities Fund	-16.9	-20.8	-24.5	-3.7	11.9		-
Asia Value Fund	-13.0	-13.7	-16.6	0.2	3.1		•
DFA Emerging Markets Small Cap Portfolio	-15.5	-10.8	-15.3	-0.9	-1.4	7.8	7.8
Highclere Emerging Markets SMID CF	-17.4	-19.8	-24.1	•	*		
New Silk Road ADEC Fund	-17.6	-9.6	-13.7		•		
MSCI Emerging Markets Small Cap Index	-16.7	-9.8	-15.2	-1.1	-2.4	7.4	
Median Manager Return	-16.5	-14.8	-19.0	-4.7	-3.8	2.2	3.9
CALENDAR YEAR PERFORMANCE							
	2014	2013	2012	2011	2010	2009	2008
Albizia ASEAN Opportunities Fund	4.9	-2.7	62.0	15.1	94.2	100	
Asia Value Fund	2.4	6.7	29.8	-7.0	32.1		
DFA Emerging Markets Small Cap Portfolio	3.0	-1.4	24.4	-22.6	30.2	99.7	-54.5
Highclere Emerging Markets SMID CF	3.3		-	-	-		
New Silk Road ADEC Fund	-0.1	-	-	-	-	-	
MSCI Emerging Markets Small Cap Index	1.0	1.0	22.2	-27.2	27.2	113.8	-58.2
Median Manager Return	-2.8	-1.5	18.9	-19.7	19.1	75.0	-54.7





### **Deep Dive Research Memo**

## GLOBAL EQUITY MANAGER SUMMARY FEG'S SIX-TENET PERSPECTIVE

STRATEGY SUMMARY



Either sourced from SITFO staff or provided by FEG, the deep dive research memo will cover:

- Firm and organizational stability
- Investment Team
- Investment Strategy Process/Philosophy
- Investment Performance Analysis
- Terms and Fees



### **Operational Due Diligence**

Operational Due Diligence will be conducted by FEG's ODD team, separate from SITFO staff and FEG investment manager research staff's due diligence processes

#### **Due Diligence Checklist**

DUE DILIGENCE ITEM	COMPLETE	COMMENTS
Request for Information (RFI) Reviewed	V	Completed
Quantitative Analysis /Performance Verification	V	Completed
Prior two years' audited financials/review	V	Completed
On-site due diligence visit	V	August 2012
Reference Checks	<b>√</b>	Completed
Form ADV Part 1 and 2A	V	Completed
Documents Review	V	Completed
Operational Due Diligence	V	Completed
Counterparty/ Service Providers Check	V	Completed
Due Diligence Questionnaire	V	Completed
Submit to Investment Policy Committee	V	April 8, 2013
Information in WG	V	Completed
Compliance Questionnaire	V	Completed



Exhibit F 08.17.2016

## **Portfolio Review**



## Total International Stock (VTPSX)

- Brexit Volatility
- Dragging Sectors:

   Financials, Consumer
   Services, Industrials

Stock characteristics Total International Stock Index	Fund
Number of stocks	6,062
Median market cap	\$20.7B
Price/earnings ratio	19.1x
Price/book ratio	1.5x
Return on equity	14.6%
Earnings growth rate	7.1%
Equity yield (dividend)	3.2%
Turnover rate (fiscal year end)	2.5%

Sector diversification as % of common stock					
	Total International	FTSE Global All Cap ex US Index			
Basic Materials	7.3%	7.3%			
Consumer Goods	16.8	16.7			
Consumer Services	8.8	8.8			
Financials	24.0	23.9			
Health Care	8.8	8.8			
Industrials	14.1	14.2			
Oil & Gas	6.5	6.5			
Technology	5.5	5.5			
Telecommunications	4.6	4.6			
Utilities	3.6	3.7			
Sector categories are based on	the Industry Classification Benchm	ark system.			

#### Total returns

	Periods ended June 30, 2016					
	Quarter	Year to date	One year	Three years	Five years	Since inception
Total International Stock Index Fund Institutional Plus Shares (November 30, 2010)	0.24%	0.09%	-9.07%	2.06%	0.63%	2.69%
Spl Total International Stock Index	-0.52%	-0.81%	<b>-</b> 9.44%	1.95%	0.57%	2.38%
FTSE Global All Cap ex US Fair Value Index	0.26%	0.14%	_	_	_	-%

#### Total International Stock Index Fund Europe United Kingdom 13.8 Switzerland 6.2 6.0 France Germany 5.8 2.1 Sweden Netherlands 2.1 Spain 2.0 Italy 1.6 Denmark 1.4 Belgium 1.1 1.9 Other Subtotal 44.0 Japan 17.4 5.2 3.4 Hong Kong 2.6 1.0 Singapore Other 0.3 Subtotal 29.9 **Emerging Markets** 4.6 3.1 2.4 India 1.6 Brazil 1.6 South Africa Other 5.4 Subtotal 18.7 North America Canada 6.9 Middle East Other 0.5

100.0%

Total

Country diversification % of common stock



## Structured Broad Market Equity (VSBPX)

- Weak Selection
  - Energy
  - Health Care
  - Industrials

Stock characteristics	
Structured Broad Market Fund	
Number of stocks	244
Median market cap	\$24.7B
Price/earnings ratio	17.1x
Price/book ratio	2.5x
Return on equity	16.9%
Earnings growth rate	9.0%
Equity yield (dividend)	2.3%
Foreign holdings	0.4%
Turnover rate (fiscal year end)	65.8%

3 month attribution										
	Р	ortfolio		Be	nchmarl	k	At	Attribution		
	Avg. weight	3 mo. return	Contrib. Return	Avg. weight	3 mo. return	Contrib. Return	Alloc. effect	Select effect	Total effect	
Information Technology	19.6	0.0	0.0	19.5	-1.9	-0.4	0.0	0.4	0.4	
CASH	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Consumer Discretionary	13.2	-1.1	-0.1	13.3	-1.3	-0.2	0.0	0.0	0.0	
Consumer Staples	9.1	4.3	0.4	9.1	4.8	0.4	0.0	-0.1	0.0	
Financials	17.4	2.7	0.5	17.5	2.7	0.5	0.0	0.0	0.0	
Telecommunication Services	2.5	5.3	0.1	2.4	7.4	0.2	0.0	-0.1	0.0	
Materials	3.3	0.9	0.0	3.3	4.9	0.2	0.0	-0.1	-0.1	
Utilities	3.5	3.9	0.1	3.5	7.4	0.3	0.0	-0.1	-0.1	
Health Care	14.0	3.7	0.5	14.1	6.1	0.8	0.0	-0.3	-0.3	
Industrials	10.7	-1.1	-0.1	10.8	1.5	0.1	0.0	-0.3	-0.3	
Energy	6.4	-4.7	-0.3	6.5	11.1	0.7	0.0	-1.0	-1.0	
TOTAL	100.0	1.1	1.1	100.0	2.6	2.6	0.0	-1.5	-1.5	

	Quarter	Year to date	One year	Three years	Five years	Ten years
Structured Broad Market Fund Institutional Plus Shares (May 3, 2004)	1.15%	0.66%	0.75%	12.03%	12.56%	7.51%
Russell 3000 Index	2.63%	3.62%	2.14%	11.13%	11.60%	7.40%
Multi-Cap Core Funds Average	1.21%	1.64%	-2.41%	8.29%	8.70%	5.71%



## **Structured Large-Cap Equity (VSLPX)**

- Weak Selection
  - Consumer Discretionary
  - Industrials

Stock characteristics	
Structured Large-Cap Equity Fund	
Number of stocks	178
Median market cap	\$29.9B
Price/earnings ratio	17.7x
Price/book ratio	2.6x
Return on equity	16.8%
Earnings growth rate	8.0%
Equity yield (dividend)	2.2%
Foreign holdings	0.6%
Turnover rate	
(fiscal year end)	72.9%

3 month attribution									
	Р	ortfolio		Benchmark			Attribution		
	Avg. weight	3 mo. return	Contrib. Return	Avg. weight	3 mo. return	Contrib. Return	Alloc. effect	Select effect	Total effect
Information Technology	20.2	-0.9	-0.2	20.2	-2.8	-0.6	0.0	0.4	0.4
Financials	16.0	4.1	0.6	15.9	2.1	0.3	0.0	0.3	0.3
Consumer Staples	10.3	6.9	0.7	10.3	4.6	0.5	0.0	0.2	0.2
CASH	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Care	14.7	6.1	0.9	14.6	6.3	0.9	0.0	0.0	0.0
Telecommunication Services	2.7	3.7	0.1	2.7	7.1	0.2	0.0	-0.1	-0.1
Materials	2.8	-3.8	-0.1	2.9	3.7	0.1	0.0	-0.2	-0.2
Utilities	3.4	-0.4	0.0	3.4	6.8	0.2	0.0	-0.2	-0.2
Energy	7.1	7.6	0.5	7.1	11.6	8.0	0.0	-0.3	-0.3
Industrials	10.1	-2.2	-0.2	10.1	1.4	0.1	0.0	-0.4	-0.4
Consumer Discretionary	12.7	-6.3	-0.8	12.7	-0.9	-0.1	0.0	-0.7	-0.7
TOTAL	100.0	1.5	1.5	100.0	2.5	2.5	0.0	-0.9	-1.0

	Periods ended June 30, 2016						
	Quarter	Year to date	One year	Three years	Five years	Ten years	
Structured Large-Cap Equity Fund Institutional Plus Shares (May 15, 2006)	1.48%	3.11%	3.93%	12.49%	13.21%	7.64%	
S&P 500 Index	2.46%	3.84%	3.99%	11.66%	12.10%	7.42%	
Large-Cap Core Funds Average	1.99%	2.21%	0.52%	9.47%	10.00%	6.00%	



## Strategic Equity (VSEQX)

Stock characteristics	
Strategic Equity Fund	
Number of stocks	328
Median market cap	\$4.2B
Price/earnings ratio	17.9x
Price/book ratio	2.3x
Return on equity	14.7%
Earnings growth rate	12.0%
Equity yield (dividend)	2.0%
Foreign holdings	1.0%
Turnover rate (fiscal year end)	70.4%

Sector diversification as %	of common stock	
	Strategic Equity	MSCI US Small + Mid Cap 2200 Index
Consumer Discretionary	15.0%	14.9%
Consumer Staples	4.7	4.8
Energy	5.0	5.0
Financials	22.8	22.8
Health Care	9.7	9.7
Industrials	14.1	14.1
Information Technology	15.5	15.6
Materials	6.1	6.0
Telecommunication Services	1.0	1.0
Utilities	6.1	6.1

3 month attribution									
	Portfolio			Benchmark			Attribution		
	Avg. weight	3 mo. return	Contrib. Return	Avg. weight	3 mo. return	Contrib. Return	Alloc. effect	Select effect	Total effect
Information Technology	15.4	5.3	0.8	15.5	1.4	0.2	0.0	0.6	0.6
CASH	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telecommunication Services	0.9	5.9	0.1	0.9	3.2	0.0	0.0	0.0	0.0
Financials	22.6	4.0	0.9	22.7	4.3	1.0	0.0	-0.1	-0.1
Consumer Discretionary	15.4	-4.8	-0.8	15.4	-3.8	-0.6	0.0	-0.2	-0.2
Utilities	5.7	4.2	0.2	5.7	8.8	0.5	0.0	-0.2	-0.2
Consumer Staples	4.9	-0.6	0.0	4.8	6.8	0.3	0.0	-0.3	-0.3
Industrials	14.1	-0.9	-0.1	14.2	1.7	0.2	0.0	-0.4	-0.3
Materials	6.0	2.2	0.1	6.0	8.3	0.5	0.0	-0.4	-0.4
Health Care	9.9	-1.4	-0.2	10.0	5.4	0.6	0.0	-0.7	-0.7
Energy	4.7	-11.5	-0.6	4.8	14.2	0.6	0.0	-1.2	-1.2
TOTAL	100.0	0.5	0.5	100.0	3.3	3.3	0.0	-2.8	-2.8

Periods ended J	une 30,	2016
-----------------	---------	------

	Quarter	Year to date	One year	Three years	Five years	Ten years	
Strategic Equity Fund (August 14, 1995)	0.46%	0.88%	-4.34%	10.96%	11.49%	6.61%	
Spliced Small and Mid Cap Index	3.29%	4.64%	-1.54%	10.29%	10.50%	7.85%	
Mid-Cap Core Funds Average	2.13%	3.65%	-3.69%	8.08%	8.41%	6.55%	



## **Short-Term Investment-Grade (VFSIX)**

- Avg. Duration: 2.6 years
- Drag: Underweight Industrials
- Boost: Out-Of-Benchmark ABS, CMBS

Distribution by credit quality as % of bonds				
U.S. Government	15.7%			
Aaa	18.5			
Aa	13.0			
A	27.6			
Baa	21.7			
Ва	1.2			
В	0.2			
Not Rated	2.1			
Total	100.0%			

Distribution by issuer as % of bonds	
Asset-Backed	11.1%
Commercial Mortgage-Backed	10.4
Finance	26.1
Foreign	6.8
Government Mortgage-Backed	0.2
Industrial	24.9
Treasury/Agency	16.2
Utilities	2.8
Other	0.6
Short-Term Reserves	0.9
Total	100.0%

		Periods ended June 30, 2016				
	Quarter	Year to date	One year	Three years	Five years	Ten years
Short-Term Investment-Grade Fund Institutional Shares (September 30, 1997)	1.31%	3.11%	3.29%	2.58%	2.45%	3.77%
Barclays US 1-5 Year Credit Index	1.31%	3.07%	3.09%	2.60%	2.65%	4.32%
1-5 Year Inv-Grade Debt Funds Avg	1.07%	2.17%	1.71%	1.45%	1.63%	2.59%



## Intermediate-Term Investment-Grade (VFIDX)

- Avg. Duration: 5.5 years
- Underweight BBB, Shorter Duration
- Poor security selection: Industrials (Energy)

Distribution by credit quality as % of bonds	
U.S. Government	6.5%
Aaa	12.8
Aa	15.4
A	44.2
Baa	18.7
Ва	0.4
В	0.1
Not Rated	1.9
Total	100.0%

Distribution by issuer as % of bonds	
Asset-Backed	8.0%
Commercial Mortgage-Backed	5.4
Finance	30.2
Foreign	2.7
Government Mortgage-Backed	0.1
Industrial	40.5
Treasury/Agency	7.7
Utilities	4.9
Other	0.2
Short-Term Reserves	0.3
Total	100.0%

		Periods ended June 30, 2016				
	Quarter	Year to date	One year	Three years	Five years	Ten years
Intermediate-Term Investment-Grade Fund Admiral Shares (February 12, 2001)	2.47%	6.12%	7.11%	5.12%	5.11%	6.20%
Barclays US 5-10 Year Credit Index	3.26%	7.47%	7.63%	5.72%	5.66%	6.71%
Spliced Core Bond Funds Average	2.31%	5.05%	4.98%	3.64%	3.66%	4.52%



## TIPS (VIPIX)

- Avg. Duration: 8.4 years
- Longer Duration

Distribution by effective maturity as % of bonds	
Under 1 Year	0.3%
1 - 3 Years	14.3
3 - 5 Years	17.4
5 - 10 Years	44.9
10 - 20 Years	12.3
20 - 30 Years	10.8
Over 30 Years	0.0
Total	100.0%

		Periods ended June 30, 2016				
	Quarter	Year to date	One year	Three years	Five years	Ten years
Inflation-Protected Securities Fund Institutional Shares (December 12, 2003)	1.79%	6.44%	4.73%	2.42%	2.70%	4.66%
Barclays US Trsy Inflat Prtcd Index	1.71%	6.24%	4.35%	2.31%	2.63%	4.75%
Inflation Protected Bond Funds Avg	1.62%	5.21%	2.56%	1.13%	1.56%	3.64%

## Treasury (VEDTX)

- Avg. Duration: 24.8 years
- Highly rate sensitive, long term STRIPS
- Recent volatility spike (Flight to Quality)
- Significant short-term fluctuation (Structural)

Total fund volatility	measures			
	Barclays Treasury STRIPS 20–30 Year Index	Barclays Aggregate Bond Index		
Fund r-squared	0.99	0.76		
Fund beta	1.06	5.54		
R-squared and beta are calculated from trailing 36-month fund returns relative to				

the associated benchmark.

	Periods ended June 30, 2016					
	Quarter	Year to date	One year	Three years	Five years	Since inception
Extended Duration Treasury Index Fund Institutional Shares (November 28, 2007)	10.11%	23.00%	29.78%	15.18%	16.63%	10.32%
Barclays US Trsy Strips 20-30Yr Eq	9.53%	21.90%	29.18%	15.37%	16.70%	10.54%

## **UBS TPF**

• Invested: \$51,239,897

YTD Net Return: 3.38%

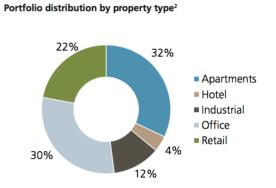
• 12 Mo. Net: 9.6%

7 Year Net Annualized: 8.95%

10 Year Net Annualized: 5.57%

(vintage 2007)





Markets	% Portfolio
New York	15%
Chicago	10%
Los Angeles	9%
Boston	8%
San Francisco	7%
Washington DC	7%
Denver	5%
Dallas	5%
Portland	4%
Phoenix	3%
	73%

## LaSalle V

• Committed: \$19,000,000

• Called: \$17,083,673

• % Called: 90%

• IRR: 13%

• (vintage 2007, realization 2016)

		After Fee	
	Since Inception	Rolling 4 Quarters	Current Quarter
Income	6.4%	6.9%	1.6%
Appreciation	1.3%	-6.6%	-3.1%
Total	7.8%	0.0%	-1.5%

#### Internal Rate of Return (at carrying value), Leveraged

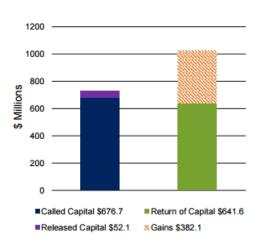
Before Fee 15.5% After Fee 13.1%

### 2.7 Fund Summary

Fund Summary	
Fund origination	July 2007
Last acquisition	November 2011
Fund termination date	September 2016
Total investor commitments	\$728.8 MM
Cumulative subscriptions called	\$676.7 MM
Cumulative distributions	\$1,023.7 MM
Fund net asset value	\$109.0 MM

#### I. Property Map







## Fidelity Real Estate Growth Fund III

• Committed: \$14,250,000

• Called: \$11,766,938

• % Called: 83%

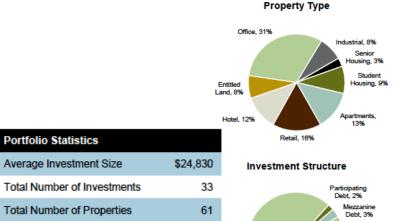
• IRR: 7.9%

• (vintage 2007, realization 2016)

Largest Metropolitan Areas	
Los Angeles, CA	17%
Dallas, TX	15%
New York, NY	14%
Chicago, IL	11%
San Diego, CA	5%

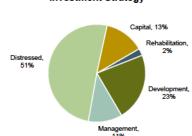
Largest Investments	
ACC Student Housing Portfolio	\$74,700
The Arboretum	\$54,701
Sheraton Gateway LAX	\$51,667
356-366 10th Avenue	\$45,536
Pacific Station	\$44,280

	Total Contributed Capital	Total Cash Distributions	Current Market Value <sup>1</sup>	Actual Annualized IRR <sup>2</sup>
Total Fund (net of management fee & expenses)	\$781,582	\$907,501	\$143,263	7.9%
Total Fund (net of management fee, expenses & carried interes	st)		\$143,263	7.9%



Equity, 95%







## **CRP III**

Committed: \$14,250,000

Called: \$13,300,100

% Called: 93%

IRR: 9.1%

(vintage 2008)

### Resulting return on invested equity

· 2011: 5.0%

· 2012: 6.0%

· 2013: 6.3%

· 2014: 6.3%

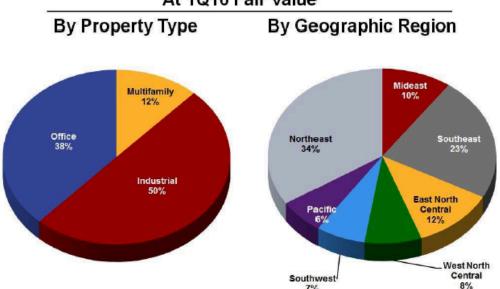
2015: 6.3%

2016: 5.0% (projected)

	Gross	Net
IRR	11% to 13%	8% to 10%
Multiple	1.8x to 1.9x	1.6x to 1.7x

Estimated holding period through 4Q21. Projections are subject to change. Please see Appendix for complete disclosures.

### At 1Q16 Fair Value



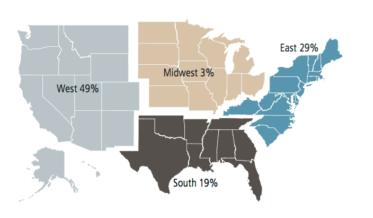
## **UBS TPI**

- Invested: \$76,382,547
- YTD Net Return: 4.85%
- 12 Mo. Net: 10.94%
- 7 Year Net Annualized: 9.7% (vintage 2010)

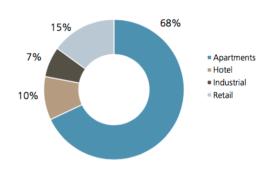
### Largest Markets (%)

	TPI
Los Angeles	16
San Diego	13
Atlanta	12
Washington, DC	12
Seattle	9

Distribution by geographic division<sup>2</sup>



Portfolio distribution by property type<sup>2</sup>



## **CRP IV**

• Committed: \$43,435,000

• Called: \$36,784,803

• % Called: 85%

• IRR: 21.4%

• (vintage 2012)

	Gross	Net
IRR	13% to 15%	10% to 12%
Multiple	2.0x to 2.1x	1.8x to 1.9x

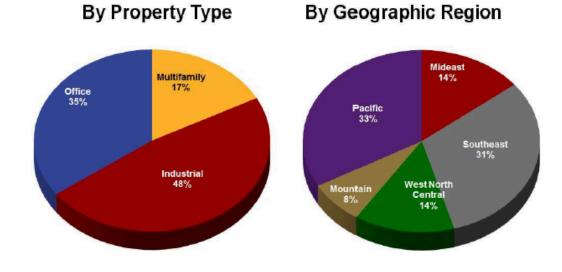
Estimated holding period through 2Q24. Projections are subject to change. Please see Appendix for complete disclosures.

## Resulting return on invested equity

**- 2014: 5.6%** 

2015: 6.4%

2016: 6.0% (projected)



At 1Q16 Fair Value

## LWREP IV

• Committed: \$43,435,000

• Called: \$45,833,121

• % Called: 106%

IRR: 13.8%

• (vintage 2012)

Net IRR by Time Period	Quarter	One Year	Three Year	Inception to Date <sup>4</sup>
Total Fund (net of management fee, expenses & carried interest) <sup>6</sup>	1.2%	8.5%	15.3%	13.8%

#### **Property Type**

# Industrial, 16% Office, 44%

### Geographic Region

Southeast, 33%

\$12,108

60

Southwest, 20%

rgest Investments		Portfolio Statistics
5 Montague	\$26,221	Average Investment Size
erwalk at Millennium	\$21,703	Total Number of Investments
age at Camp Bowie	\$18,425	Total Number of Properties
hardson Office Campus	\$18,168	
3 West 52nd Street	\$17,789	

Largest Metropolitan Areas	
New York, NY	17%
Dallas, TX	14%
Atlanta, GA	14%
Philadelphia, PA	8%
Tampa, FL	7%

For Sale Residential, 7%

Largest Investments	
195 Montague	\$26,221
Riverwalk at Millennium	\$21,703
Village at Camp Bowie	\$18,425
Richardson Office Campus	\$18,168
133 West 52nd Street	\$17,789

## LaSalle VI

• Committed: \$33,775,000

• Called: \$29,771,635

• % Called: 88%

• (vintage 2012, realization 2020)

		After Fee	
	Since Inception	Rolling 4 Quarters	Current Quarter
Income	2.6%	3.6%	1.2%
Appreciation	11.0%	14.5%	3.2%
Total	13.9%	18.5%	4.5%

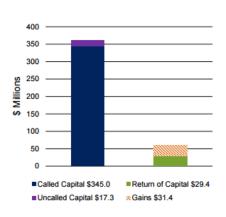
#### Internal Rate of Return, Leveraged

Before Fee	20.1%
After Fee	16.2%

### 2.9 Fund Summary

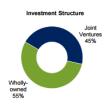
Fund origination	January 2012
Expiration of investment period	January 2015
Fund maturity date	January 2020
Total investor commitments	\$362.3 MM
Cumulative subscriptions called	\$345.0 MM
Uncalled commitments	\$17.3 MM
Cumulative distributions	\$60.8 MM







Pacific 27%



## **LWREP V**

• Committed: \$24,250,000

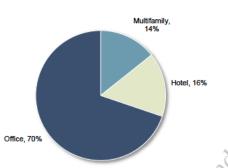
• Called: \$6,538,078

• % Called: 27%

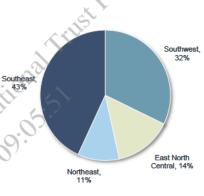
• (vintage 2015)







### Geographic Region



Largest Metropolitan Areas	
Atlanta, GA	43%
San Antonio, TX	16%
Chicago, IL	14%
Philadelphia, PA	10%
Dallas, TX	9%

Largest Investments	
Georgia 400 Center	\$27,488
The Hotel at Avalon	\$22,500
The Forum	\$22,109
Westmont Village Apartments	\$20,209
Evolve Corporate Center	\$14,596

Portfolio Statistics	
Average Investment Size	\$17,678
Total Number of Investments	8
Total Number of Properties	16

## Cash Flow August 2016

### Inflows

Beginning Balance: \$39,950,079.58

Cash From SITLA: \$393,101.73

Vanguard Distribution (VFIDX): \$501,823.16

Vanguard Distribution (VFSIX): \$478,117.34

LaSalle VI Distribution: \$4,978,846.81

### Outflows

LWREP V Capital Call: \$1,646,632.64

Total: \$46,301,968.62 Total: \$1,646,632.64

Net Cash Balance: \$44,655,335.98

